

Listing of Claims:

- 1 1. (Currently amended) A method of addressing a bistable cholesteric liquid crystal
2 material having incremental reflectance properties disposed between opposed
3 substrates, wherein one substrate has a first plurality of electrodes deposited thereon
4 facing the other substrate which has a second plurality of electrodes disposed thereon,
5 the intersection of the first and second plurality of electrodes forming a plurality of
6 pixels, the addressing method comprising:
7 applying a predetermined number of pulses to the first plurality of electrodes
8 within a set period of time, each said pulse applied to the first electrodes having a
9 different drive period within said set period of time;
10 applying a like number of said predetermined number of pulses to the second
11 plurality of electrodes within said set period of time, each said pulse applied to the
12 second electrodes also having said different drive periods within said set period of
13 time; and
14 each of said predetermined number of pulses having a different frequency
15 selectively associating one of two amplitude values with at least one of said
16 predetermined number of pulses applied to the electrodes to generate a desired
17 incremental reflectance for each of the pixels, wherein said desired incremental
18 reflectance is determined by which one of said amplitude values is associated with
19 which one of said different drive periods.
- 1 2. (Cancelled)
- 1 3. (Currently amended) The method according to claim 2 1, further comprising:
2 preparing said liquid crystal material by applying a preparation pulse to the first
3 and second plurality of electrodes, prior to said applying steps.
- 1 4. (Currently amended) The method according to claim 2 1, wherein each of said
2 different frequency pulses drive periods are applied to the first and second plurality
3 of electrodes at the same time.

- 1 5. (Currently amended) The method according to claim 2 1, wherein the number of said
2 predetermined number of pulses correspond to a different number of said desired
3 incremental reflectances.
- 1 6. (Currently amended) The method according to claim 2 1, wherein a number of said
2 desired incremental reflectances at each pixel is equal to two raised to the number of
3 said predetermined number of pulses less one, or less a constant value.
- 1 7. (Currently amended) The method according to claim 2 1, wherein said pulses are
2 bipolar.
- 1 8. (Currently amended) The method according to claim 2 1, wherein said pulses are
2 unipolar.
- 1 9. (Currently amended) The method according to claim 2 1, wherein the number of said
2 predetermined number of pulses is equal to a number of said desired incremental
3 reflectances.
- 1 10. (Currently amended) The method according to claim 9, wherein said number of said
2 desired incremental reflectances corresponds to a like said number of drive periods,
3 each said drive period having a different length of time than all other said drive
4 periods.
- 1 11. (Currently amended) The method according to claim 2 1, wherein said number of said
2 predetermined number of pulses is equal to an exponent number applied to two,
3 wherein the exponent number corresponds to a number of pulses, plus one, or plus a
4 constant value.

- 1 12. (Currently amended) The method according to claim 11, wherein said exponent
2 number of pulses corresponds to ~~a like number of said~~ drive periods, each said drive
3 period having a different length of time, and wherein the additional pulse corresponds
4 to a preparation pulse.
- 1 13. (Original) The method according to claim 12, wherein the shortest drive period is
2 about half the duration of the next longest drive period.
- 1 14. (Original) The method according to claim 12, wherein each drive period is at least
2 either about twice as long in duration as the next shortest drive period or about half
3 as short in duration as the next longest drive period.
- 1 15. (Currently amended) A liquid crystal display, comprising:
2 a pair of opposed substrates having disposed therebetween a cholesteric liquid
3 crystal material, one of said substrates having a first plurality of electrodes disposed
4 thereon facing the other of said substrates which has a second plurality of electrodes,
5 wherein the intersection of said first and second plurality of electrodes form a plurality
6 of pixels; and
7 a drive circuit that applies a predetermined number of pulses to said first
8 plurality of electrodes and a like number of pulses to said second plurality of
9 electrodes within a set period of time, each of said predetermined number of pulses
10 having a different frequency drive period within said set period of time, said drive
11 circuit associating one of two amplitude values with at least one of said predetermined
12 number of pulses to generate a desired incremental reflectance for each of the pixels
13 which is determined by which one of said amplitude values is associated with which
14 one of said different drive periods.
- 1 16. (Cancelled)

- 1 17. (Currently amended) The liquid crystal display according to claim 15, wherein said
2 drive circuit applies each of said different frequency pulses drive periods to said first
3 and second plurality of electrodes at the same time.
- 1 18. (Currently amended) The liquid crystal display according to claim 15, ~~wherein said~~
2 liquid crystal material has incremental reflectance properties and wherein the number
3 of said predetermined number of pulses correspond to a different number of
4 incremental reflectances.
*AJ
contd*
- 1 19. (Currently amended) The liquid crystal display according to claim 15, ~~wherein said~~
2 liquid crystal material has incremental reflectance properties and wherein the number
3 of said predetermined number of pulses is equal to a number of incremental
4 reflectances.